

LPDES PERMIT NO. LA0001091, AI NO. 1291, ACTIVITY NO. PER20080002**LPDES STATEMENT OF BASIS
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

COMPANY/FACILITY: Cabot Corporation
Ville Platte Facility
P. O. Box 100
Ville Platte, Louisiana 70586

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
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DATE PREPARED: April 2, 2008

I. PERMIT STATUS**A. Reason For Permit Action:**

Proposed reissuance of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301, 4901, and 4903.

B. LPDES permit effective date: December 1, 2003
LPDES permit expiration date: November 30, 2008

C. Application was received on June 4, 2008. Additional information received via email correspondence April 1, 2009.

II. FACILITY INFORMATION**A. Location:**

2066 Cabot Road, Evangeline Parish
Latitude: 30° 44' 54", Longitude: 92° 15' 4"

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B. Applicant Activity:

Cabot Corporation owns and operates an existing carbon black manufacturing facility in Ville Platte, Evangeline Parish.

The Ville Platte Plant uses a modular process to convey a carbonaceous feedstock material into various grades of carbon black in an essentially continuous process.

The process begins with the introduction of fuel, oxidants, water and additives into a reaction zone where a pyrolysis reaction is used to produce carbon black. Supporting utilities are used to maintain these reactants at proper temperatures, pressures and flows. The reaction is controlled by varying the temperature and fluid mechanic of the process. The carbon black and reaction by-products are then introduced to a primary separation process where gaseous by-products are removed from the carbon black. These by-products are collected and either combusted or subjected to additional processing. The recovered carbon black is sent to a secondary separation process.

After separation, certain grades are processed further while others are considered to be in their final form and conveyed to storage or packaged for transportation to the customer.

The stormwater only outfalls designated Outfall SW1 -SW10 in the application are not associated with process areas or other areas with a high potential for increased levels of contamination. Therefore, these outfalls will be covered under the Storm Water Pollution Prevention Plan (SWPPP) requirements. This plan is designed to prevent and/or reduce the pollutants in stormwater discharges. Exceeding the limits of 50 mg/l for TOC, 15 mg/L for Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Additionally, a visual inspection of the facility is required annually.

C. Technology Basis:

40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401, 405-417 and 421-471 as adopted by reference in LAC 33:IX.4903.

Guideline

Carbon Black Thermal Process

Reference

40 CFR Part 458 Subpart B

Other sources of technology based limits:

Current Permit (Effective December 1, 2003)

Similar Outfalls at Existing Facilities

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

Louisiana Water Quality Management Plan for Sanitary Dischargers

LDEQ Sanitary General Permit LAG530000

LDEQ Sanitary General Permit LAG540000

Best Professional Judgment

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D. Fee Rate:

1. Fee Rating Facility Type: Minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC codes: 2895

E. Continuous Facility Effluent Flow:

0.2166 million gallons per day (MGD)

III. RECEIVING WATERS:

A. Stream:

Unnamed drainage ditch, thence to Bayou Boeuf-Cocodrie Diversion Channel.

B. Basin and Subsegment:

Vermilion-Teche River Basin, Subsegment 060210

C. Designated Uses:

The designated uses of this subsegment in the Vermilion-Teche River Basin are primary contact recreation, secondary contact recreation, propagation of fish and wildlife.

IV. OUTFALL INFORMATION

Outfall 001:

- A. Discharge Type - The continuous discharge of treated stormwater, compressor non-contact cooling waters, A/C cooling waters, washdown waters and non-contact process water.
- B. Location - At the point of discharge from the flow meter prior to combining with other waters at Latitude 30° 44' 55", Longitude 92° 15' 6".
- C. Treatment - Settling ponds and containment boom; aluminum sulfate and/or diquat solution is used when needed on process wastewater and washdown water.
- D. Flow - 203,616 GPD
- E. Receiving Waters - Bayou Boeuf-Cocodrie Diversion Channel via local drainage
- F. Basin and Subsegment - Vermilion - Teche River Basin, Segment 060210

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Outfall 002:

- A. Discharge Type - The continuous discharge of treated sanitary wastewater.
- B. Location - At the point of discharge from the treatment facility prior to combining with other waters at Latitude 30° 45' 5", Longitude 92° 15' 7".
- C. Treatment - Commercial treatment plant which includes equalization, aeration, sedimentation, sludge recirculation, ultraviolet and aerobic sludge digestion.
- D. Flow - 12,960 GPD
- E. Receiving Waters - Bayou Bocuf-Cocodric Diversion Channel via local drainage
- F. Basin and Subsegment - Vermilion - Teche River Basin, Segment 060210

Outfall 003:

- A. Discharge Type - The intermittent discharge of stormwater and well overflow wastewaters.
- B. Location - At the point of discharge from the concrete box downstream from the standpipe overflow prior to combining with other waters at Latitude 30° 44' 57", Longitude 92° 15' 7".
- C. Treatment - None
- D. Flow - 0.162 MGD
- E. Receiving Waters - Bayou Boeuf-Cocodrie Diversion Channel via local drainage
- F. Basin and Subsegment - Vermilion - Teche River Basin, Segment 060210

Outfall 004:

- A. Discharge Type - Sanitary wastewater
- B. Location - At the point of discharge from the security guard office treatment facility at Latitude 30° 44' 49.7", Longitude 92° 15' 0.5".
- C. Treatment - Aerobic treatment system
- D. Flow - 50 GPD
- E. Receiving Waters - Bayou Boeuf-Cocodrie Diversion Channel
- F. Basin and Subsegment - Vermilion - Teche River Basin, Segment 060210

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V. PROPOSED CHANGES FROM PREVIOUS PERMIT:

The permittee requested a change in monitoring frequency for sanitary wastewater Outfall 002. The compliance history and monitoring frequency as required by LPDES General Permit LAG540000 were considered. The change of the monitoring frequency from once per week to once per month for flow, TSS and fecal coliform for Outfall 002 was found to be justified based upon the permittee's compliance history for these parameters and to be more consistent with LPDES General Permit LAG540000.

VI. PERMIT LIMIT RATIONALE:

The following section sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. Also, set forth are any calculations or other explanations of the derivation of specific effluent limitation and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. Outfall 001:

The continuous discharge of treated non-contact process wastewater, compressor non-contact cooling waters, A/C cooling waters, washdown water and stormwater runoff.

Process wastewater and stormwater runoff being discharged to Outfall 001 receive BPL limitation/monitoring requirements according to the following schedule:

PARAMETER	MONTHLY AVERAGE (mg/L)	DAILY MAXIMUM (mg/L)	MONITORING FREQUENCY
Flow-MGD	Report	Report	Continuously
TSS	20	30	1/month
TOC	---	75	1/month
Oil & Grease	10	15	1/month
pH(standard units)	6.0	9.0	1/month

Site Specific Considerations for Outfall 001

Flow is established in accordance with LAC 33:IX.2707.1.1.b. Flow shall be monitored continuously and reported on the DMR.

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TSS and TOC shall be monitored at a frequency of once per month and collected as 24 – hour composite samples. These limitations and monitoring requirements have been retained from the current LPDES permit, effective on December 1, 2003.

Oil and Grease limitations and/or monitoring requirements are established based on best professional judgment. Oil and Grease shall be monitored at a frequency of once per month and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month when discharging and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

B. Outfall 002:

The continuous discharge of treated sanitary wastewater.

Treated sanitary wastewater being discharged to Outfall 002 receives BPJ limitation/monitoring requirements according to the following schedule:

PARAMETER	MONTHLY AVERAGE (mg/L)	WEEKLY AVERAGE (mg/L)	MONITORING FREQUENCY
Flow-MGD	Report	Report	1/week
BOD ₅	30	45	1/month
TSS	30	45	1/week
Fecal Coliform Colonies/100 ml	200	400	1/week
pH(standard units)	6.0	9.0	1/month

Site Specific Considerations for Outfall 002

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per week and reported on the DMR as an estimate.

BOD₅ limitations and monitoring requirements are established in accordance with the LPDES Class II General Permit LAG540000. These requirements have been retained from the current LPDES permit effective on December 1, 2003.

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TSS limitations and monitoring requirements are established based on Class II General Permit LAG540000. TSS shall be monitored at a frequency of once per week and collected as a grab sample. These requirements have been retained from the current LPDES permit effective on December 1, 2003.

Fecal coliform limiting and monitoring requirements are established in accordance with LPDES Class II General Permit LAG540000. These requirements have been retained from the current LPDES permit effective on December 1, 2003. The limit requirements have been retained from the current LPDES permit effective on December 1, 2003.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

C. Outfall 003:

The intermittent discharge of well overflow and stormwater runoff.

Wastewaters and stormwater runoff being discharged to Outfall 003 receive BPJ limitation/monitoring requirements according to the following schedule:

PARAMETER	MONTHLY AVERAGE (mg/L)	DAILY MAXIMUM (mg/L)	MONITORING FREQUENCY
Flow-MGD	Report	Report	1/month
TSS	---	135	1/month
TOC	---	50	1/month
Oil & Grease	10	15	1/month
pH(standard units)	6.0	9.0	1/month

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Site Specific Considerations for Outfall 003

Flow is established in accordance with LAC 33:IX.2707.1.1.b. Flow shall be monitored at a frequency of once per month when discharging and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

TSS limitations are established based on limits assigned to discharges from oxidation ponds and is consistent with stormwater discharges from carbon black facilities. This limit was established for Outfall 003 in State Permit WP 1534 when stormwater was added to this outfall. This limit has been in the permit since September 25, 1992, and has been retained in subsequent permits. TSS shall be monitored at a frequency of once per month when discharging and collected as a grab sample.

TOC and Oil and Grease limitations and monitoring requirements are established based on best professional judgment. TOC and Oil and Grease were established for Outfall 003 in State Permit WP 1534 when stormwater was added to this outfall. This limit has been in the permit since September 25, 1992, and has been retained in subsequent permits. TOC and Oil and Grease shall be monitored at a frequency of once per month when discharging and collected as a grab samples.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month when discharging and collected as a grab sample. This limit has been in the permit since September 25, 1992, and has been retained in subsequent permits. TOC and Oil and Grease shall be monitored at a frequency of once per month when discharging and collected as a grab samples.

D. Outfall 004:

The intermittent discharge of treated sanitary wastewater.

Treated sanitary wastewater being discharged to Outfall 004 receives BPJ limitation/monitoring requirements according to the following schedule:

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PARAMETER	MONTHLY AVERAGE (mg/L)	WEEKLY AVERAGE (mg/L)	MONITORING FREQUENCY
Flow-MGD	Report	Report	1/6 months
BOD ₅	30	45	1/6 months
TSS	30	45	1/6 months
Fecal Coliform Colonies/100 ml	200	400	1/6 months
pH(standard units)	6.0	9.0	1/6 months

Site Specific Considerations for Outfall 004

These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

BOD₅ limitations and monitoring requirements are established in accordance with the LPDES Class I General Permit LAG530000. These requirements have been retained from the current LPDES permit effective on December 1, 2003.

TSS limitations and/or monitoring requirements are established based on Class I General Permit LAG530000. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

Fecal coliform limiting and monitoring requirements are established in accordance with LPDES Class I General Permit LAG530000. These requirements have been retained from the current LPDES permit effective on December 1, 2003.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month when discharging and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on December 1, 2003.

VII. TMDL WATERBODIES

Subsegment 060210, Bayou Carron of the Vermilion-Teche Basin is not listed on the 2006 Final Integrated 303(d) as impaired. However, subsegment 060210 was previously listed as impaired for nutrients, suspended solids/turbidity/siltation, Organic enrichment/low DO and phosphorus for which TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based

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upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The TMDL for TSS, Turbidity and Siltation for the Bayou Teche Watershed was final on May 2, 2002. As per the TMDL "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as in the previous LPDES and/or NPDES permits.

VIII. COMPLIANCE HISTORY/DMR REVIEW

- A. There have been no compliance orders issued to Cabot Corporation, Vile Platte facility for the period of January 1, 2005 through December 31, 2008 as of April 3, 2009.
- B. The most recent inspection was conducted July 26, 2005 through July 26, 2005. The inspection indicated that TSS was exceeded for Outfall 001. Upon investigation, it was found that a river otter upstream of the facility was stirring up sediment. The facility removed debris and dredged the channel. The inspectors referred this issue to the Enforcement Division of the Louisiana Department of Environmental Quality.
- C. A file review of all DMRs submitted from January 1, 2004 through April 3, 2009 was conducted. The following excursions were noted:
 - 1. 10/01/2005

Outfall 003: TOC limits were exceeded. It was determined that a wastewater line upstream was broken. Repairs were completed on the line 10/05/2005.
 - 2. 09/15/2006:

Outfall 002: TSS and Fecal Coliform limits were exceeded. An operator had emptied an unusually large amount of diluted corn syrup (sucrose) into the sanitary water collection system. Adjustments were made to the sanitary treatment unit to compensate. The remaining sucrose was shipped off-site and the practice of using sucrose was ceased.

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3. 06/19/2008:

Continuous flow measurements were interrupted due to the "tripping" of a GFC. The UPS battery backup system operated properly. However, the facility was not notified of this "trip" until the back power was exhausted. The continuous flow measure devices were not operating for 1 hour and 36 minutes. This was remedied by installing an additional back up power supply along with a method of notification when the flow meter moves from line power to back up power.

IX. "IT" QUESTIONS

Cabot Corporation, Ville Platte Facility is an existing minor facility; therefore, responses to the IT Questions are not required for submission.

X. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060210 of the Vermilion - Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008, from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XI. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. TENTATIVE DETERMINATION

Based on preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

XIII. VARIANCES

This Office has received no requests for variances.

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XIV. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENT

In accordance with LAC 33:IX.2707.1.3 and 4 [40 CFR 122.44(l)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. **For first time permit issuance**, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

XV. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing list